

## I. AMENDMENT

### In the Claims:

Please amend the claims by replacing them with the following listing of claims, which will replace all prior versions and listings of claims in the application.

1-53. (Canceled)

54. (Previously Presented) A method of treating an extract of a cell comprising:

- (a) obtaining at least one cell;
- (b) obtaining a thiol-containing reducing agent;
- (c) preparing an admixture of an extract of the cell and the thiol-containing reducing agent; and
- (d) heating the admixture to a temperature and for a time required to result in the inactivation of any RNase A, RNase 1, and/or RNase T1 present in the admixture;

wherein there is no detectable RNase A, RNase 1, or RNase T1 activity in the admixture after the heating step.

55. (Canceled)

56. (Previously Presented) The method of claim 54, wherein preparing an admixture of an extract of the cell and the reducing agent comprises:

- (a) first preparing an extract of the cell; and
- (b) then mixing the extract with the reducing agent.

57. (Previously Presented) The method of claim 54, wherein preparing an admixture of an extract of the cell and the reducing agent comprises:

- (a) first mixing the cell and the reducing agent; and
- (b) then preparing an extract of the cell in the presence of the reducing agent.

58. (Currently Amended) The method of claim 54, ~~further defined as a method for producing cDNA from one or more cells and~~ further comprising incubating the admixture with reverse transcriptase under conditions to allow reverse transcription and the production of cDNA.

59. (Original) The method of claim 58, further comprising amplifying the products of the reverse transcription.

60. (Original) The method of claim 58, further comprising incubating said admixture with a deoxyribonuclease prior to the reverse transcription reaction.

61. (Previously Presented) The method of claim 54, wherein the said reducing agent is dithiothreitol (DTT),  $\beta$ -mercaptoethanol, cysteine, or dithioerythritol (DTE).

62. (Original) The method of claim 54, wherein the reducing agent is DTT.

63. (Original) The method of claim 54, wherein said the final concentration of the DTT is between 1 and 200 mM in the admixture.

64. (Original) The method of claim 63, wherein the final concentration of DTT is 20 mM in the admixture.

65. (Original) The method of claim 54, wherein said reducing agent is  $\beta$ -mercaptoethanol.

66. (Original) The method of claim 65, wherein the final concentration of  $\beta$ -mercaptoethanol is between 1 and 200 mM in the admixture.

67. (Original) The method of claim 54, wherein said reducing agent is cysteine.

68. (Original) The method of claim 67, wherein the final concentration of cysteine is between 1 and 200 mM in the admixture.

69. (Previously Presented) The method of claim 54, wherein further comprising mixing the reducing agent is comprised in a buffer composition prior to admixing in step (c).

70. (Original) The method of claim 54, wherein the admixture is heated to at least 37°C.

71. (Previously Presented) The method of claim 54, wherein the admixture is heated to at least between 60°C and 90°C.

72. (Previously Presented) The method of claim 54, wherein the admixture is heated for at least 4 between 3 and 20 minutes.

73. (Currently Amended) A method for producing cDNA from one or more cells comprising:

- (a) obtaining at least one cell;
- (b) obtaining a thiol-containing reducing agent;
- (c) preparing an admixture of an extract of the cell and the reducing agent;
- (d) heating the admixture to a temperature and for a time required to result in the inactivation of any RNase A, RNase 1, and/or RNase T1 present in the admixture and wherein there is no detectable RNase A, RNase 1, or RNase T1 activity in the admixture after the heating; and
- (e) incubating the admixture with reverse transcriptase under conditions to allow reverse transcription

wherein cDNA is produced by reverse transcription of RNA in the admixture.

74. (Canceled)

75. (Previously Presented) The method of claim 73, wherein preparing an admixture of an extract of the cell and the reducing agent comprises:

- (a) first preparing an extract of the cell; and
- (b) then mixing the extract with the reducing agent.

76. (Previously Presented) The method of claim 73, wherein preparing an admixture of an extract of the cell and the reducing agent comprises:

- (a) first mixing the cell and the reducing agent; and
- (b) then preparing an extract of the cell in the presence of the reducing agent.

77. (Original) The method of claim 73, further comprising amplifying the products of the reverse transcription.

78. (Original) The method of claim 73, further comprising incubating said admixture with a deoxyribonuclease prior to the reverse transcription reaction.

79. (Original) The method of claim 73, wherein the said reducing agent is DTT,  $\beta$ -mercaptoethanol, cysteine, or dithioerythritol.

80. (Previously Presented) A kit for producing cDNA from a cell, comprising, in one or more suitable containers:

- (a) a buffer; and
- (b) a thiol-containing reducing agent;
- (c) a reverse transcription buffer
- (d) a reverse transcriptase; and
- (e) a dNTP mix.

81. (Original) The kit of claim 80, wherein the buffer and the reducing agent are comprised in the same container.

82. (Canceled)

83. (Original) The kit of claim 80, further comprising a deoxyribonuclease.

84. (Original) The kit of claim 80, wherein said reducing agent is DTT.

85. (Original) The kit of claim 80, further comprising an RNase inhibitor.
86. (Previously Presented) The kit of claim 80, further comprising a ribonuclease resistant artificial viral coat encapsidated RNA standard.
87. (Previously Presented) A kit for producing cDNA from a cell comprising, in one or more suitable container(s):
- (a) a cell lysis buffer;
  - (b) a deoxyribonuclease;
  - (c) an RNase inhibitor;
  - (d) a reverse transcription buffer;
  - (e) reverse transcriptase;
  - (f) dNTPs;
  - (g) a thiol-containing reducing agent; and
  - (h) a ribonuclease resistant artificial viral coat encapsidated RNA standard.
88. (Canceled)
89. (Canceled)
90. (Canceled)
91. (Previously Presented) The method of claim 54, wherein the admixture initially comprises at least one ribonuclease which is inactivated by the combination of the reducing agent and heating.
92. (Canceled)

93. (Previously Presented) The method of claim 91, wherein the at least one ribonuclease is RNase A.

94. (Previously Presented) The method of claim 91, wherein the at least one ribonuclease is RNase T1.

95. (Previously Presented) The method of claim 91, wherein the at least one ribonuclease is RNase 1.

96. (Canceled)

97. (Canceled)

98. (Previously Presented) The method of claim 73, wherein the admixture initially comprises at least one ribonuclease which is inactivated by the combination of the reducing agent and heating.

99. (Canceled).

100. (Previously Presented) The method of claim 91, wherein the at least one ribonuclease is RNase A.

101. (Previously Presented) The method of claim 91, wherein the at least one ribonuclease is RNase T1.

102. (Previously Presented) The method of claim 91, wherein the at least one ribonuclease is RNase 1.

103. (Previously Presented) The method of claim 91, wherein the admixture comprises at least one ribonuclease which was comprised in the cell and which is inactivated by the combination of the reducing agent and heating.
104. (Previously Presented) The method of claim 79, wherein the reducing agent is DTT.
105. (Previously Presented) The method of claim 104, wherein said the final concentration of the DTT is between 1 and 200 mM in the admixture.
106. (Previously Presented) The method of claim 105, wherein the final concentration of DTT is 20 mM in the admixture.
107. (Previously Presented) The method of claim 79, wherein said reducing agent is  $\beta$ -mercaptoethanol.
108. (Previously Presented) The method of claim 107, wherein the final concentration of  $\beta$ -mercaptoethanol is between 1 and 200 mM in the admixture.
109. (Previously Presented) The method of claim 79, wherein said reducing agent is cysteine.
110. (Previously Presented) The method of claim 109, wherein the final concentration of cysteine is between 1 and 200 mM in the admixture.
111. (Canceled)
112. (Previously Presented) The method of claim 73, wherein the reducing agent is comprised in a buffer composition prior to preparation of the admixture.
113. (Previously Presented) The method of claim 73, wherein the admixture is heated to at least 37°C.

114. (Previously Presented) The method of claim 113, wherein the admixture is heated to at least between 60°C and 90°C.

115. (Canceled)

116. (Canceled)

117. (Canceled)

118. (Previously Presented) The method of claim 73, wherein the admixture is heated for at least 3 minutes.

119. (Previously Presented) The method of claim 87, wherein the reducing agent is comprised in the lysis buffer.

120. (Previously Presented) The method of claim 73, further defined as a method of comprising preparing cDNA from a cellular extract without RNA purification.

121. (Canceled)